

Energy Efficiency and Conservation Plan

For

Oklahoma Educational Television Authority

Fiscal Year 2012

Energy Manager

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Objective:

To meet the requirements of Senate Bill 833 issued May 14th, 2009:

“TO ENCOURAGE THE REDUCTION OF ENERGY CONSUMPTION BY STATE AGENCIES AND THE ENVIRONMENTAL IMPACT OF STATE AGENCY OPERATIONS”

Senate Bill 833, an act relating to environment and natural resources; requiring state agencies to develop energy efficiency and conservation plans; stating requirements of plans; providing for storage of plans and assistance in implementing plans; providing for codification; and providing an effective date.

Each agency shall transmit a copy of its Energy efficiency plan and conservation plan to the Department of Central Services on or before November 1, 2009.

Section I: Energy Team Overview

- A. The Energy Team is comprised of three (3) representatives from the following departments and functions within the organization: Administration, Maintenance, and Finance. The Energy Team was established in August of 2009 and meets to discuss energy management issues, such as organization-wide energy use reduction policies, capital improvement plans, maintenance issues, etc.

- B. Executive Director of OETA, or designee (405) 841-9250
Chief Engineer, or designee (405) 841-9266
Deputy Director of Administration and Finance, or designee (405) 841-9247

- C. Recognizing our responsibility as Energy Efficiency Team members for OETA, we believe that every effort should be made to conserve energy and our natural resources. We also believe that this commitment will be beneficial to our agency employees and taxpayers in prudent financial management and the saving of energy.

The fulfillment of this policy is the joint responsibility of the Team, Director and the support personnel. Cooperation shall be experienced on all levels for the success of this policy.

Section II: Facility/Site Description

The main OETA facility is located at 7403 N Kelley Ave in Oklahoma City, Oklahoma. The building was built in 1956 with additions made in 1978 and 2008, totaling 21,933 square feet. OETA operates 24 hours a day with 59 personnel on staff and 59 computers. Additionally, OETA has three other staffed locations. One office is located Tulsa, Oklahoma. It is approximately 10,800 square foot and has seven (7) employees and seven (7) computers. The second facility is located in Eufaula, Oklahoma and is approximately 1,836 square feet and has one staff member and one computer. The third manned location is in Cheyenne, Oklahoma and is approximately 1,536 square feet and employs one full-time and one part-time employee. There is one shared computer at this location.

During the first year OETA will concentrate on reducing energy consumption at the Oklahoma City location and then bring the other locations on board during the second year.

Section III: Energy Plan Elements

Goal 1: Reduce the agency's annual maintenance and operating budget devoted to energy consumption (usage).

Strategy 1.1: Collect annual energy usage data for agency

Objective 1.1.2: Gather energy usage from utility meters to include the low power translator sites which are unmanned.

Strategy 1.2: Collect annual energy usage data for vehicle fleet owned or leased by the reporting organization in order to improve fleet vehicle efficiency. Include annual average mileage of fleet, number of vehicles in fleet, and age of vehicles in fleet.

Objective 1.2.1: Determine annual miles per gallon of vehicle fleet currently as a benchmark.

Objective 1.2.2: Determine annual miles per gallon of vehicle fleet after purchasing more fuel efficient vehicle(s)

Strategy 1.4: Identify and implement five (5) initiatives to reduce power consumption in the office and support areas by November 1, 2013.

Objective 1.4.1: Develop a power consumption model for office and support area assets

Objective 1.4.2: Develop administrative policies that support green initiatives

Goal 2: Promote agency operations and practices that will reduce, to the extent practicable, the environmental impact of the agency's overall operation

Strategy 2.1: Materials, Products and Services – develop new or revise existing standards and criteria for purchasing materials, products or services which:

Objective 2.1.1: Consider the availability of bio-based products

Objective 2.1.2: Express a preference for the purchase of products that are made from, and/or packaged with, recycled materials, and products that are, themselves recyclable in whole or in part

Strategy 2.2: Fuel-efficient Fleet - establish criteria for a more fuel-efficient fleet that will result in a more fuel-efficient agency vehicle fleet

Objective 2.2.1: OETA currently has 12 vehicles that are leased and purchased. When replacing vehicles, consider fuel efficiency for the vehicles' intended use.

Objective 2.2.2: Utilize electric vehicles for maintenance and operational needs when possible. Leased vehicles would require State Motor Pool to lease electric vehicles.

Strategy 2.3: Recycling Program – establish recycling programs for paper and plastic waste.

Objective 2.3.1: Implement a recycling program for paper, plastic, glass, cardboard, and aluminum by November 1, 2011.

Objective 2.3.2: Participate in the recycling of toner cartridges.

Strategy 2.4: Lighting Systems - establish and implement policies and practices that will reduce energy consumption attributable to lighting systems, including, but not limited to the following:

Objective 2.4.1: Policies that ensure lighting systems are turned off during non-operating hours

Objective 2.4.2: Convert to more energy-efficient lighting systems and bulbs via compact fluorescent lamps (CFLs) etc.

Objective 2.4.3: Maximize use of natural lighting whenever possible and consistent with temperature control

Strategy 2.5: Heating, Ventilation, and Air Conditioning Systems - establish measures to ensure that Heating, Ventilation, and Air Conditioning (HVAC) systems operate at reduced levels during non-operating hours.

Objective 2.5.1: Implement schedules to control HVAC systems

Objective 2.5.2: Set/adjust timers for air conditioning, etc.

Strategy 2.6: Computer Equipment – establish policies and practices designed to ensure that all electrically-powered equipment, including computer equipment, is turned off when not in use, and that personal computers are configured with default settings that ensure that computers go into "sleep mode" after 30 minutes or less of non-use

Objective 2.6.1: Purchase ENERGY STAR computers, printers, copiers, etc.

Objective 2.6.2: Set timers for computers to go into sleep mode after 30 minutes or less of non-use

Strategy 2.7: Paper Usage – establish policies and practices designed to reduce the use of paper, including but not limited to:

Objective 2.7.1: Reduce internal paper consumption by 10% by November 1, 2013

Objective 2.7.2: Implement duplexer add-ons to printers which will automatically print dual-side prints of multi-page documents

Objective 2.7.3: Encourage users to use the setting of typeface fonts and default page margins in word-processed or other agency-printed documents, so as to maximize paper use

Objective 2.7.4: Encourage and require, where appropriate, the use of electronic, "paperless" communication between agency employees, in lieu of printed materials.

Strategy 2.8: Reducing Non-essential Electricity Usage - establish agency-wide policies designed to reduce "plug load" attributable to the use of non-essential appliances, such as personal coffee makers, toasters, space heaters, refrigerators, microwave ovens, fans, televisions, radios, etc.

Objective 2.8.1: Develop standards for personal appliances

Objective 2.8.2: Communicate standards through newsletters, employee forums, and broadcast media

Strategy 2.9: Training / Culture of energy awareness – establish a training program for agency employees and building Energy Managers in order to ensure better understanding and support of Green Initiatives

Objective 2.9.1: Establish a training program in the implementation of low- and no-cost operation and maintenance conservation measures

Objective 2.9.2: Establish a training program for the designated agency supervisory personnel, who will be responsible for monitoring and enforcing energy-efficiency measures within the agency

Objective 2.9.3: Create an Energy Team comprised of representatives from throughout the organization

Objective 2.9.4: Create an energy policy to be accepted agency-wide

Objective 2.9.5: Hold regular meetings of the Energy Team to discuss agency-wide integration of energy, financial, and strategic goals

Objective 2.9.6: Send out regular email alerts on energy efficiency measures

Objective 2.9.7: Set lights out and computer shut-down policies for end of day

Strategy 2.11: Building Envelope – Evaluate building envelope(s) for energy conservation measures.

Objective 2.11.1: Install insulation where needed

Strategy 2.12: Water Conservation

Objective 2.12.1: Baseline water usage

Objective 2.12.2: Identify water conservation opportunities

Objective 2.12.3: Assess and prioritize opportunities

Objective 2.12.4: Repair leaky faucets

Goal 3: Integrate energy use considerations into maintenance plans

Strategy 3.1: Enhance preventative and routine maintenance procedures to maximize energy efficiency

Objective 3.1.1: Perform filter changes for HVAC systems at regular intervals

Objective 3.1.2: Perform regular inspections for pneumatic leaks

Objective 3.1.3: Decommission high energy use equipment

Strategy 3.2: Integrate energy considerations into cleaning / janitorial activities

Objective 3.2.1: Evaluate need for / frequency of various cleaning activities

Objective 3.2.2: Utilize cleaning products that reduce energy and water consumption

Objective 3.2.3: Schedule custodial functions closer to operational hours

Strategy 3.3: Evaluate high efficiency replacements of all equipment

Objective 3.3.1: Replace all failed motors with premium efficiency ones

Objective 3.3.2: Replace all failing appliances with ENERGY STAR as minimum standard

Goal 4: Integrate energy use considerations into capital improvement plans

Strategy 4.1: Incorporate energy efficiency considerations into new construction or renovation projects

Objective 4.2.1: Provide details on all new construction projects that will be started in the next year and note if life-cycle cost analysis was used to reduce water, energy, and other utilities.

Objective 4.2.3: Provide details on all major renovation projects that will be started in the next year.

Objective 4.2.4: Provide details on all planned purchases of constructed or renovated buildings in the next year.

Goal 5: Agency 2 year Goals

Strategy 5.1: Reduce transportation costs by 10% by November 1, 2013.

Strategy 5.2: Reduce electricity costs by 10% by November 1, 2013.

Strategy 5.2: Reduce paper usage by 10% by November 1, 2013.